

### **REMARKS**

The Office Action mailed November 10, 2009, has been carefully reviewed and these remarks are responsive thereto. Claim 1 has been amended to be in a more preferred form. Claims 29-32 have been added. No new matter has been added. Claims 1-4, 9-14, 20-24, and 28-32 are presented for examination upon entry of the present paper. Reconsideration and allowance of the instant application are respectfully requested.

#### ***Claim Rejections Under 35 U.S.C. § 112***

Claims 28 stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. This rejection is traversed.

The Office Action at page 2 contends that the specification fails to provide sufficient direction to one skilled in the art to make and use the invention, wherein a first and second signal inclusion schedule are different signal inclusion schedules. Adequate support for this feature can be found at least at paragraph [61] of the specification and throughout the specification as a whole. For example, paragraph [61] states: “Similarly, for ease of understanding, different storage units 326a and 326b (for storing messaging send and receive schedules) are shown.” (Emphasis added.) Thus, emulation IC may include more than one signal inclusion schedule and these schedules may be different. Furthermore, paragraphs [43], [47], and [57] and Figures 3-4 describe/illustrate storage units 326a and 326b as each storing a signal inclusion schedule. Accordingly, the specification describes the subject matter recited in the claims in adequate detail to enable one skilled in the art to make and use the inventive features of claim 28.

Claim 28 stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. This rejection is traversed.

The Office Action at page 3 contends that the specification, as originally filed, does not disclose a first and second signal inclusion schedule as being different from one another. Applicants disagree. Paragraphs [43], [47], and [57], and Figure 3 describe/illustrate separate storage units 326a and 326b, and hence, the potential for different signal inclusion schedules (e.g., written description support is provided for features related to a first signal inclusion schedule and a second signal inclusion schedule being different signal inclusion schedules).

Furthermore, paragraph [61] describes that storage units 326a and 326b “may share a common storage unit in storing their *respective* schedules.” The use of the term “respective” indicates a potential independence (e.g., a difference) between the schedules.

Based on the foregoing remarks, Applicants request withdrawal of the section 112 rejections.

***Claim Rejections Under 35 U.S.C. § 103***

Claims 1-3, 9-13, and 20-24 stand rejected 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,265,894 to Reblewski et al. (hereinafter referred to as “Reblewski”) in view of U.S. Patent No. 6,064,677 to Kappler et al. (hereinafter referred to as “Kappler”) and U.S. Patent No. 5,923,656 to Duan et al. (hereinafter referred to as “Duan”). Claims 4 and 14 stand rejected 35 U.S.C. § 103(a) as being unpatentable over Reblewski, in view of Kappler and Duan, and further in view of U.S. Pub. No. 2003/0053435 to Sindhushayana et al. (hereinafter referred to as “Sindhushayana”). Claim 28 stands rejected 35 U.S.C. § 103(a) as being unpatentable over Reblewski, in view of Kappler and Duan, and further in view of U.S. Patent No. 6,198,723 to Parruck et al. (hereinafter referred to as “Parruck”). Applicants respectfully traverse these rejections.

Independent claim 1 recites, among other features, “a storage unit comprising a signal inclusion schedule . . . the message assembled in accordance with the signal inclusion schedule and including a plurality of signals, wherein the signal inclusion schedule selects the plurality of signals from at least one pin when the message is assembled.”

The Office Action at page 4 correctly indicates that Reblewski and Kappler fail to describe the above-noted features recited in claim 1 related to selecting a plurality of signals from at least one pin. The Office Action takes Official Notice that “implementation of ATM switch fabrics in integrated circuits is well-known in the art, and therefore it would have been obvious to one of ordinary skill in the art that the selection of a cell for transfer would comprise *transmission over an IC pin*.” Office Action, page 4 (emphasis added). The Office Action at pages 4-5 cites Duan at Figure 2 and column 7, lines 17-35 and lines 53-65, for an ATM switch fabric that selects a winning set of cells, and further asserts that it would have been obvious to

one of ordinary skill in the art at the time of the invention to combine the scheduler disclosed in Duan with the reconfigurable integrated circuit of Reblewski, as modified by Kappler. Applicants disagree.

First, according to MPEP 2144.03, Official Notice is rarely appropriate when the assertion is made without documentary support. While the Office Action, at page 4, cites Duan for describing “a cell scheduler in an ATM switch fabric that selects a winning set of cells” the Office Action fails to provide documentary support for at least features of independent claim 1 related to a schedule inclusion scheduler selecting a plurality of signals from at least one pin. Indeed, the Office Action notes that “Duan does not explicitly disclose selecting the signal from a pin.” Office Action, page 4. The Office Action is correct; Duan does not describe such a feature. Therefore, Duan is not proper documentary support for the Official Notice.

Further, Official Notice unsupported by documentary support is only proper for facts that are of a “notorious character” and that are “capable of instant and unquestionable demonstration.” MPEP § 2144.03(A). Claim 1, however, recites features “wherein the signal inclusion schedule selects the plurality of signals from at least one pin when the message is assembled.” Such selecting is not a “fact,” nor is it either of a notorious character or capable of instant and unquestionable demonstration. Therefore, for at least these reasons, the Office Action’s taking of Official Notice is improper.

Second, even assuming, without conceding, that the Office Action is correct in the asserted position that “it would have been obvious to one of ordinary skill in the art that the selection of a cell for transfer would comprise *transmission over an IC pin*,” such an assumption does not render obvious the features recited by claim 1 related to selecting a plurality of signals from at least one pin. Office Action, page 4 (emphasis added). For example, assuming that transmission over an IC pin is known in the art does not teach or suggest features of a “*signal inclusion schedule select[ing] the plurality of signals from at least one pin when the message is assembled*,” as recited by claim 1 (emphasis added). Accordingly, for at least these reasons, the Office Action’s taking of Official Notice is respectfully traversed.

Thus, claim 1 is allowable for at least these reasons.

Independent claims 9, 20, and 24 recite features similar to those described above with respect to claim 1. As such, claims 9, 20, and 24 are allowable for at least reasons substantially similar to those discussed above with respect to claim 1 and in further view of the novel and non-obvious features described therein.

Claims 2-4, 10-14, 21-23 and 28 depend from one of independent claims 9, 20, and 24, and are allowable for at least the same reasons as their respective base claims and in further view of the novel and non-obvious features recited therein. Each of the additional applied references (e.g., Sindhushayana and Parruck) is cited for other features and fail to remedy the deficiencies discussed above.

### ***New Claims***

Claims 29-32 have been added. Support for these new claims can be found throughout the originally filed specification, claims and figures and at least at paragraphs [49], [61], [66], [67], [69]-[72] and Figure 7. Although these claims have not been rejected, the following remarks are in support of these claims.

Claims 29-32 depend from one of independent claims 1 and 24 and are allowable for at least the same reasons as discussed above with respect to their base claims and in further view of the novel and non-obvious features recited therein. For example, claim 29 recites features wherein the first signal inclusion schedule comprises a message send schedule and the second signal inclusion schedule comprises a message receive schedule. Claim 30 recites features wherein the message is generated and transmitted for a number of clock cycles of an operating clock, and the signal inclusion schedule is determined to provide a number of signal selections equal to the number of clock cycles. Claim 31 recites features wherein the message is generated and transmitted for a number of clock cycles of an operating clock, and the signal inclusion schedule is determined to provide a number of signal selections less than the number of clock cycles. Claim 32 recites features wherein the order specified by the signal inclusion schedule is determined based on the determined frequency of occurrence. Neither Reblewski, Kappler, Duan, Sindhushayana nor Parruck, either alone or in any combination thereof, teach or suggest such features.

**CONCLUSION**

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below. Applicants look forward to passage to issue of the present application at the earliest convenience of the Office.

Respectfully submitted,  
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